

1
2 **CLAIMS:**

3 **1.** A processor-readable medium having processor-executable
4 instructions that, when executed by a processor, performs a method comprising:

5 receiving a unicast acquisition media-stream transmission, which
6 corresponds to a target multicast media-stream transmission; .

7 decoding the content of the unicast acquisition media-stream transmission;

8 switching reception from the unicast acquisition media-stream transmission
9 to the target multicast media-stream transmission.

10 **2.** A medium as recited in claim 1, wherein the method further
11 comprises:

12 receiving an indication to change to a new channel, the new channel being
13 the target multicast media-stream transmission;

14 requesting the target multicast media-stream transmission, wherein the
15 transmission is representative of the new channel.

16 **3.** A medium as recited in claim 1, wherein the method further
17 comprises:

18 receiving an indication to change to a new channel, the new channel being
19 represented by the target multicast media-stream transmission and the unicast
20 acquisition media-stream;

21 requesting the unicast acquisition media-stream which corresponds to the
22 target multicast media-stream transmission;

1 4. A medium as recited in claim 1, wherein the method further
2 comprises presenting the decoded content of the unicast acquisition media-stream
3 transmission.

4

5 5. A medium as recited in claim 1, wherein the method further
6 comprises decoding and presenting the decoded content of the target multicast
7 media-stream transmission after the switching.

8

9 6. A medium as recited in claim 1, wherein the method further
10 comprises requesting cessation of transmission of the unicast acquisition media-
11 stream transmission.

12

13 7. A medium as recited in claim 1, wherein frame properties of the
14 unicast acquisition media-stream transmission match those of the target multicast
15 media-stream transmission.

16

17 8. A medium as recited in claim 1, wherein frame properties of the
18 unicast acquisition media-stream transmission do not match those of the target
19 multicast media-stream transmission.

20

21 9. A medium as recited in claim 1, wherein the frames of the unicast
22 acquisition media-stream transmission are encoded using a lower bit-rate than that
23 used by the target multicast media-stream transmission.

1 **10.** A medium as recited in claim 1, wherein the switching occurs before
2 the reception of a random-access point (RAP) in the target multicast media-stream
3 transmission.

4

5 **11.** A medium as recited in claim 1, wherein the switching occurs during
6 or close to the reception of a random-access point (RAP) in the target multicast
7 media-stream transmission.

8

9 **12.** A computing device comprising:
10 a media-stream presentation device;
11 a medium as recited in claim 1.

12
13
14
15
16
17
18
19
20
21
22
23
24
25

1
2 **13.** A processor-readable medium having processor-executable
3 instructions that, when executed by a processor, performs a method comprising:

4 receiving a low bit-rate unicast acquisition media-stream transmission,
5 which corresponds to a target normal bit-rate multicast media-stream transmission;

6 decoding the content of the unicast acquisition media-stream transmission;

7 receiving a normal bit-rate unicast intermediate media-stream transmission,
8 which corresponds to a target multicast media-stream transmission;

9 switching reception from the unicast acquisition media-stream transmission
10 to the unicast intermediate media-stream transmission;

11 decoding the content of the unicast intermediate media-stream
12 transmission;

13 switching reception from the unicast intermediate media-stream
14 transmission to the target multicast media-stream transmission.

15
16 **14.** A medium as recited in claim 13, wherein the method further
17 comprises:

18 receiving an indication to change to a new channel, the new channel being
19 the target multicast media-stream transmission;

20 requesting the target multicast media-stream transmission, wherein the
21 transmission is representative of the new channel.

1 **15.** A medium as recited in claim 13, wherein the method further
2 comprises presenting the decoded content of the unicast acquisition media-stream
3 transmission.

4

5 **16.** A medium as recited in claim 13, wherein the method further
6 comprises presenting the decoded content of the intermediate media-stream
7 transmission.

8

9 **17.** A medium as recited in claim 13, wherein the method further
10 comprises presenting the decoded content of the intermediate media-stream
11 transmission after the switching from the unicast acquisition media-stream
12 transmission.

13

14 **18.** A medium as recited in claim 13, wherein the method further
15 comprises decoding and presenting the content of the target multicast media-
16 stream transmission after the switching from the intermediate media-stream
17 transmission.

18

19 **19.** A medium as recited in claim 13, wherein the method further
20 comprises requesting cessation of transmission of the unicast acquisition media-
21 stream transmission.

22
23
24
25

1 **20.** A medium as recited in claim 13, wherein frame properties of the
2 intermediate media-stream transmission match those of the target multicast media-
3 stream transmission.

4

5 **21.** A medium as recited in claim 13, wherein frame properties of the
6 unicast acquisition media-stream transmission do not match those of the target
7 multicast media-stream transmission.

8

9 **22.** A medium as recited in claim 13, wherein the frames of the unicast
10 acquisition media-stream transmission are encoded using a lower bit-rate than that
11 used by the intermediate media-stream transmission.

12

13 **23.** A medium as recited in claim 13, wherein the frames of the unicast
14 acquisition media-stream transmission are encoded using a lower bit-rate than that
15 used by the target multicast media-stream transmission.

16

17 **24.** A computing device comprising:
18 a media-stream presentation device;
19 a medium as recited in claim 13.

1
2 **25.** A processor-readable medium having processor-executable
3 instructions that, when executed by a processor, performs a method comprising:

4 requesting a target multicast media-stream transmission;
5 receiving a unicast acquisition media-stream transmission, where the
6 content of the unicast acquisition media-stream transmission corresponds to that of
7 the target multicast media-stream transmission;

8 decoding and presenting the content of the unicast acquisition media-stream
9 transmission;

10 switching reception from the unicast acquisition media-stream transmission
11 to the target multicast media-stream transmission.

12
13 **26.** A medium as recited in claim 25, wherein the method further
14 comprises decoding and presenting the content of the target multicast media-
15 stream transmission after the switching.

16
17 **27.** A medium as recited in claim 25, wherein the method further
18 comprises requesting cessation of transmission of the unicast acquisition media-
19 stream transmission.

20
21 **28.** A medium as recited in claim 25, wherein frame properties of the
22 unicast acquisition media-stream transmission match those of the target multicast
23 media-stream transmission.

1 **29.** A medium as recited in claim 25, wherein frame properties of the
2 unicast acquisition media-stream transmission do not match those of the target
3 multicast media-stream transmission.

4

5 **30.** A medium as recited in claim 25, wherein the frames of the unicast
6 acquisition media-stream transmission are encoded using a lower bit-rate than that
7 used by the target multicast media-stream transmission.

8

9 **31.** A medium as recited in claim 25, wherein the switching occurs
10 before the reception of a random-access point (RAP) in the target multicast media-
11 stream transmission.

12

13 **32.** A medium as recited in claim 25, wherein the switching occurs
14 during or close to the reception of a random-access point (RAP) in the target
15 multicast media-stream transmission.

16

17 **33.** A computing device comprising:
18 a media-stream presentation device;
19 a medium as recited in claim 25.

1
2 **34.** A method facilitating fast channel-change, the method comprising:
3 requesting a target multicast media-stream transmission;
4 receiving a unicast acquisition media-stream transmission, where the
5 content of the unicast acquisition media-stream transmission corresponds to that of
6 the target multicast media-stream transmission;

7 decoding and presenting the content of the unicast acquisition media-stream
8 transmission;

9 switching reception from the unicast acquisition media-stream transmission
10 to the target multicast media-stream transmission.

11
12 **35.** A method as recited in claim 34 further comprising decoding and
13 presenting the decoded content of the target multicast media-stream transmission
14 after the switching.

15
16 **36.** A method as recited in claim 34 further comprising requesting
17 cessation of transmission of the unicast acquisition media-stream transmission.

18
19 **37.** A method as recited in claim 34, wherein frame properties of the
20 unicast acquisition media-stream transmission match those of the target multicast
21 media-stream transmission.

1 **38.** A method as recited in claim 34, wherein frame properties of the
2 unicast acquisition media-stream transmission do not match those of the target
3 multicast media-stream transmission.

4

5 **39.** A method as recited in claim 34, wherein the frames of the unicast
6 acquisition media-stream transmission are encoded using a lower bit-rate than that
7 used by the target multicast media-stream transmission.

8

9 **40.** A method as recited in claim 34, wherein the switching occurs
10 before the reception of a random-access point (RAP) in the target multicast media-
11 stream transmission.

12

13 **41.** A method as recited in claim 34, wherein the switching occurs
14 during or close to the reception of a random-access point (RAP) in the target
15 multicast media-stream transmission.

16

17 **42.** A computer comprising one or more processor-readable media
18 having processor-executable instructions that, when executed by the computer,
19 perform the method as recited in claim 34.

1
2 **43.** A multimedia system comprising:

3 a receiver configured to receive both a unicast acquisition media-stream
4 transmission and a target multicast media-stream transmission;

5 a decoding unit configured to decode both a unicast acquisition media-
6 stream transmission and a target multicast media-stream transmission;

7 a splicing unit configured to splice from the reception of the unicast
8 acquisition media-stream to the reception of the target multicast media-stream
9 transmission

10
11 **44.** A system as recited in claim 43 further comprising a channel-change
12 unit configured to receive an indication to change to a new channel and to request
13 the target multicast media-stream transmission; wherein the transmission is
14 representative of the new channel.

15
16 **45.** A system as recited in claim 43, wherein frame properties of the
17 unicast acquisition media-stream transmission match those of the target multicast
18 media-stream transmission.

19
20 **46.** A system as recited in claim 43, wherein frame properties of the
21 unicast acquisition media-stream transmission do not match those of the target
22 multicast media-stream transmission.

1 **47.** A system as recited in claim 43, wherein the frames of the unicast
2 acquisition media-stream transmission are encoded using a lower bit-rate than that
3 used by the target multicast media-stream transmission.

4
5 **48.** A system as recited in claim 43, wherein the splicing unit is further
6 configured to perform its splice before the reception of a random-access point
7 (RAP) in the target multicast media-stream transmission.

8
9 **49.** A system as recited in claim 43, wherein the splicing unit is further
10 configured to perform its splice during or close to the reception of a random-
11 access point (RAP) in the target multicast media-stream transmission.

12
13
14
15
16
17
18
19
20
21
22
23
24
25

1
2 **50.** A processor-readable medium having processor-executable
3 instructions that, when executed by a processor, perform a method comprising:

4 receiving a request for transmission of a target multicast media-stream;
5 transmitting a unicast acquisition media-stream over a unicast
6 communications network, where the unicast acquisition media-stream corresponds
7 to the target multicast media-stream.

8
9 **51.** A medium as recited in claim 50 further comprising preparing for
10 transmission the unicast acquisition media-stream based upon the same original
11 content of the corresponding target multicast media-stream.

12
13 **52.** A medium as recited in claim 50 further comprising transmitting the
14 requested target multicast media-stream over a multicast communications
15 network.

16
17 **53.** A medium as recited in claim 50, wherein the unicast acquisition
18 media-stream is encoded using a lower bit-rate than its corresponding target
19 multicast media-stream.

20
21 **54.** A computing device comprising:
22 a transmitting device for transmitting one or more media-streams via both
23 unicast and multicast communications networks;
24 a medium as recited in claim 50.